ASTHMA IN CHILDREN THROUGH THE PRISM OF MODERNITY

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Abstract. The purpose. Review of current data on the prevalence, risk factors, genetic and epigenetic factors, features of pathogenesis and course, approaches to the diagnosis and treatment of asthma in children.

Asthma in children is one of the 20 most common chronic diseases in the world that contribute to disability. In recent years, the prevalence of asthma in children has tended to increase and is up to 20 % of pediatric population, depending on the geographical region. Environmental factors, genetic predisposition, cesarean delivery, high birth weight, polluted air and passive smoking contribute to the development of asthma. In the formation of asthma in children, both allergen-specific IgE-mediated and non- IgE-mediated mechanisms, which can coexist, are important. There are "virus-induced" phenotype, "allergen-induced" phenotype, "exercise-induced" phenotype and "obesity-assosiated asthma". In children with asthma, the allergic asthma phenotype is most common (in 85 % of children with asthma), which is associated with the presence of sensitization to allergens and is mediated by type 2 T-helper cells. The clinical presentation of asthma is characterized by the presence of wheezing, coughing, chest tightness, and difficulty breathing. Establishing a diagnosis of asthma requires obtaining medical history, conducting clinical and instrumental examination methods. The goal of asthma treatment is to achieve symptom control using the lowest effective dose of medication, preferably with inhaled corticosteroids. For children under 6 years of age, a four-step approach of stepwise asthma therapy is used, and from 6 years of age - a five-step approach of recommendations and dosage of medications depending on the severity and control of asthma.

Key words: asthma, children, risk factors, diagnostics, treatment.